Please amend the remaining claims as follows:

137. (Amended) [The apparatus of claim 1, and further comprising:]

A1 cont

An apparatus for performing a hierarchical coding, comprising:

    means for forming an image data of a second hierarchy having a number of pixels which is smaller than that of an image data of a first hierarchy;

    means for correcting the image data of the second hierarchy and generating a corrected data;

    means for predicting the image data of the first hierarchy in accordance with the corrected data and generating a predicted data of the first hierarchy having a plurality of predicted pixels;

    means for calculating predictive error of the predicted data of the first hierarchy with respect to the image data of the first hierarchy;

    means for determining suitability of the corrected data in accordance with the predicted error; and

    means for outputting the corrected data as the image data of the second hierarchy in accordance with the determined result.

Sub B4

138. (Amended) [The apparatus of claim 30, and further comprising:]

An apparatus for performing a hierarchical coding, comprising:

    means for forming an image data of a second hierarchy having a number of pixels which is smaller than that of an image data of a first hierarchy;

    means for forming an image data of a third hierarchy having a number of pixels which is smaller than that of an image data of the second hierarchy;

means for correcting the image data of the third hierarchy and generating a corrected data of the third hierarchy;

first predicting means for generating predicted data of the second hierarchy, having a plurality of pixels, in accordance-with the corrected data of the third hierarchy;

second predicting means for generating a prediction value of the first hierarchy, having a plurality of pixels, in accordance with the prediction value of the second hierarchy;

error generating means for generating a predicted error of the prediction value of the first hierarchy with respect to the image data of the first hierarchy;

means for determining suitability of the corrected data of the third hierarchy in accordance with the predicted error; and

means for outputting the corrected data as the image data of the third hierarchy in accordance with the determined result.

139. (Amended) [The method of claim 47, and further comprising:]

A method of performing a hierarchical coding, comprising:

forming an image data of a second hierarchy having a number of pixels which is smaller than that of an image data of a first hierarchy;

correcting the image data of the second hierarchy and generating a corrected data;

predicting the image data of the first hierarchy in accordance with the corrected data and generating a predicted data of the first hierarchy having a plurality of predicted pixels;

calculating predictive error of the predicted data of the first hierarchy with respect to the image data of the first hierarchy;

determining suitability of the corrected data in accordance with the predicted error; and

outputting the corrected data as the image data of the second hierarchy in accordance with the determined result.

140. (Amended) [The method of claim 57, and further comprising:]

A method of decoding data represented by a hierarchical coding of an image, comprising:

receiving the coded data including at least image data of a second hierarchy having a number of pixels which is smaller than that of an image data of a first hierarchy;

decoding the image data of the first hierarchy from image data of the second hierarchy by steps of:

forming the image data of the second hierarchy and generating a corrected data;

predicting the image data of the first hierarchy in accordance with the corrected data and generating a predicted data of the first hierarchy having a plurality of predicted pixels;

calculating predictive error of the predicted data of the first hierarchy with respect to the image data of the first hierarchy;

determining suitability of the corrected data in accordance with the predicted error;

repeating the correcting operation as necessary until the corrected data becomes an optimum corrected data; and

outputtting the optimum corrected data as the image data of the second hierarchy.

141. (Amended) [The method of claim 76, and further comprising:]

A method of performing a hierarchical coding, comprising:

forming an image data of a second hierarchy having a number of pixels which is smaller than that of an image data of a first hierarchy;

forming an image data of a third hierarchy having a number of pixels which is smaller than that of an image data of the second hierarchy;

correcting the image data of the third hierarchy and generating a corrected data of the third hierarchy;

first predicting step for generating predicted data of the second hierarchy, having a plurality of pixels, in accordance with the corrected data of the third hierarchy;

second predicting step for generating a prediction value of the first hierarchy, having a plurality of pixels, in accordance with the prediction value of the second hierarchy;

error generating step for generating a predicted error of the prediction value of the first hierarchy with respect to the image data of the first hierarchy;

determining suitability of the corrected data of the third hierarchy in accordance with the predicted error; and

outputting the corrected data as the image data of the third hierarchy in accordance with the determined result.